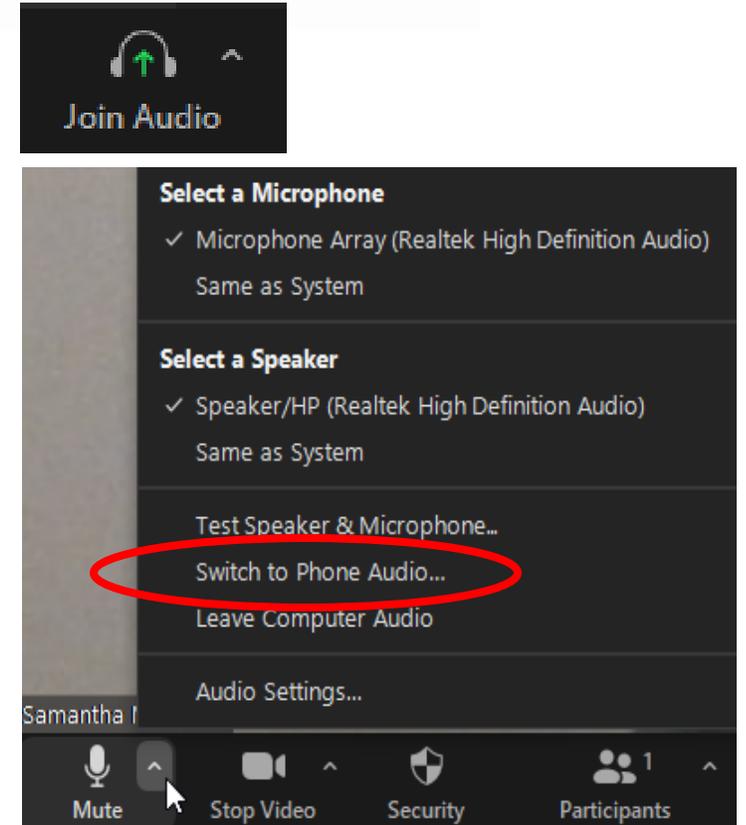


**Columbia Basin Collaborative
Hatchery & Harvest Work Group
January Meeting**

January 20th, 2023

Zoom Features

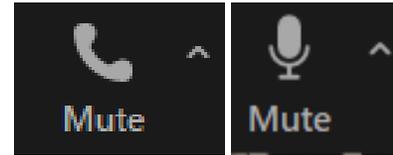
- If you have not **connected your audio**, click on the “Join Audio” at the bottom left of your screen.
- To **switch to phone**, click the arrow next to the microphone icon and select “Switch to Phone Audio”.
- If you have joined by browser, please click “Audio Settings”



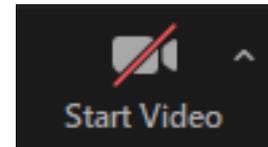
For technical support, please contact Grant Simmons, 831-331-7077

Zoom Features

Keep yourself on mute when not speaking.



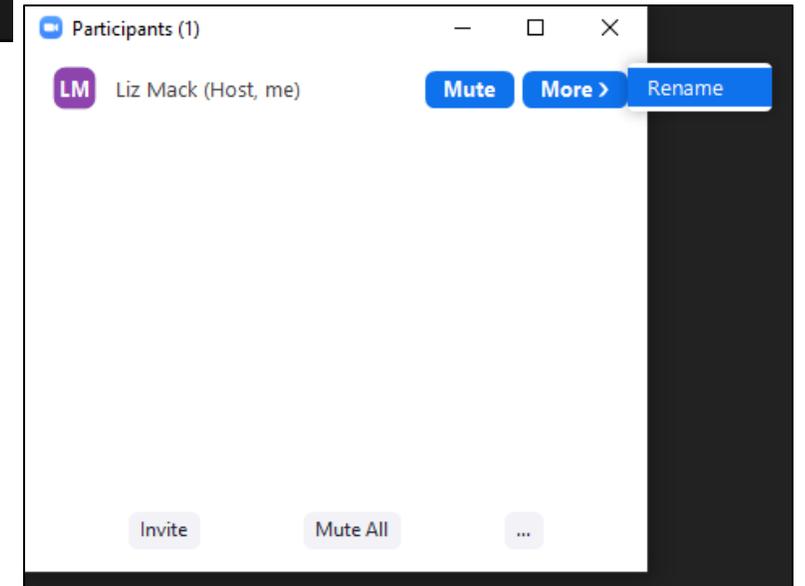
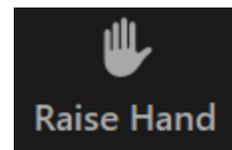
Use video, if possible, to promote face to face communication.



If needed rename yourself in the participant panel.



Find your raise hand function at the bottom of your screen



Welcome, Agenda Review, and Updates

Meeting Guidelines

- Honor the agenda
- Listen to understand and ask questions to clarify
- Balance speaking time
- Don't pile on
- Be hard on the problems, soft on the people
- Seek alignment and common ground wherever possible
- Be present



Agenda Review

Time (PT)	Topic
9:00 – 9:10 am	Welcome, Agenda Review, and Updates
9:10 – 10:10 am	Review and Discussion of Hatchery Recommendations
10:10 – 10:20 am	BREAK
10:20 – 11:50 am	Review and Discussion of Harvest Recommendations
11:50 am – 12:00 pm	Confirm Next Steps and Action Items

Hatchery/Harvest Work Plan

Meeting	Key Topics/Outcomes
<i>Kick off</i>	<ul style="list-style-type: none">• <i>Come to shared understanding of the assignment from the I/RG and information available from the CBPTF</i>• <i>Assess existing forums, gaps, and funding needs and sources</i>• <i>Agree on next steps</i>
Meeting 2	<ul style="list-style-type: none">• Review relevant data and further discuss the impacts of fisheries and the hatchery/harvest interrelationship.• Identify levels of harvest that the medium and high level goals would support.• Identify most critical information and implementation gaps and needs and opportunities. Then, crosswalk these with recommendations from other efforts to develop early recommendations.• Look stock by stock for any additional needs considering work from other groups such as HSRG recommendations and recovery plans.
Meeting 3	<ul style="list-style-type: none">• Share proposed recommendations for actions/programs considering the discussion from meeting #2 and the following:<ul style="list-style-type: none">○ Equitable distribution of harvest○ Finer-scale impacts○ Mitigation and treaty obligations
Meeting 4	<ul style="list-style-type: none">• Finalize recommendations to go to the Science Integration Work Group and the IRG.

Review and Discussion of Hatchery Recommendations

Hatcheries/Harvest Work Group

Hatcheries Recommendation concepts in progress #1

Review hatchery release and adult return data, and other appropriate metrics throughout the Basin to comprehensively understand mitigation performance.

Ensure Columbia Basin hatcheries are managed to meet mitigation goals on annual basis, contribute to achieving CBP quantitative hatchery goals, while ensuring conservation and *supporting* rebuilding of wild/natural runs. Support existing efforts that are gathering this information and making it accessible.

Hatcheries/Harvest Work Group

Hatcheries Recommendation concepts in progress #2

Repair, maintain, and build improvements to existing infrastructure and find sources of funding for deferred maintenance and system upgrades, including new equipment (capital investments). Enhance infrastructure to be climate change resilient. Utilize summary of Infrastructure needs and associated costs for Columbia basin federally funded hatcheries developed by state, federal, and tribal managers.

- 1. Update prioritization lists of infrastructure needs on a continuous basis**
- 2. Use lists to advocate for and request funding, especially from new sources**

Hatcheries/Harvest Work Group

Hatcheries Recommendation concepts in progress #3

Provide assessments of pHOS by increasing funding for parentage identification (tagging) to better evaluate hatchery percentages in natural spawning returns.

Support additional funding for assessments using existing parentage-based tagging baselines to evaluate hatchery contributions to natural spawning aggregations.

- **Monitoring should be supporting achieving progress of recovery goals.**



Break

10 minutes - Return at 10:45 PST



Review and Discussion of Harvest Recommendations

Hatcheries/Harvest Work Group

Harvest Recommendation concepts in progress #1

Develop sufficient and stable funding for additional monitoring tools and technology to assess catches and returns to optimize in-season management, including tagging.

- For example, increase sample rates with additional funding to provide more boots on the ground, improve software technology to analyze sample data in real time and increase PIT tag arrays in geographical strategic areas. In some cases, consider improving electronic reporting of catch for commercial and recreational fisheries.

Assess the funding sources to bolster existing systems.

Hatcheries/Harvest Work Group

Harvest Recommendation concepts in progress #2

Enhance forecast models by ensuring complete basin-wide run reconstruction is implemented to develop accurate database for forecasts **to help develop an accurate pre-season models and in-season models of run sizes, include improving the adult fish sampling facility at Bonneville Dam.**

Hatcheries/Harvest Work Group

Harvest Recommendation concepts in progress #4

Enhance run size updates by expanding monitoring and recording of real-time measures of effort, encounter, and harvest rates

Hatcheries/Harvest Work Group

Harvest Recommendation concepts in progress #5

Assess how climate change is impacting salmon at all life stages and effecting harvest opportunities.

Collect and gather existing information and data related to climate change effects on salmon / steelhead.

- **Use information for forecast modeling for in-season**
- **Include ocean changes, freshwater carrying capacity, and impacts to productivity**
- **Ecosystem changes caused by climate change**

Hatcheries/Harvest Work Group

Harvest Recommendation concepts in progress #6

Support and enhance current and future tribal fisheries, management, and fishing-based economies that the CBP healthy and harvestable goals would provide for salmon and steelhead in the basin.

Next Steps and Action Items

Next Steps

- KW: Write meeting summary and distribute to WG.
- All: Attend I/RG meeting if available.
- All: Review and consider the recommendation concepts that we created today.



Photo credit: Bureau of Land Management

Thank you



Photo credit: Roger Tabor

Hatchery

		Impact Level				
		Low	Medium	High	Very High	
Stock Status	Low	Will WSthd MC Sock UC Sock SN SpCH SN Sock	LC SpCH Tule FCH LC Coho LC Wsthd UC Sum CH Will Sp CH UC Sum Sthd	UC SpCH		Impact Level Low: less than 20% Medium: 20-30% High: 31-50% Very High: Greater than 50% Stock Status (based on CBP medium goal) Low: less than 25% Medium: 25-50% High: 51-75% Very High: greater than 75% Prioritization Status Red: Priority 1 Orange: Priority 2 Yellow: Priority 3 Blue: Back burner Green: Good shape
	Medium	LC Sum Sthd MC Sum Sthd LC Chum	MC SpCH SN Sum Sthd			
	High	SWW WSthd MC Coho SN FCH				
	Very High	LC Bright FCH MC FCH UC FCH				

Compiled Impacts by Stock

Sub- Region	Stock	Status	Abundance			MAFAC Phase II Impact Priority							
			Current	MAFAC Medium goal	Current as % of Medium Goal	Tributary Habitat	Estuary Habitat	Hydro (Mainstem)	Hydro (Latent)	Hydro (Blocked)	Predation	Harvest	Hatchery
Low-C	L Col R Spring Chinook	Threatened	2,240	21,550	10%	1	3	3	3	2	3	3	2
Low-C	L Col R Winter Steelhead	Threatened	5,989	27,900	21%	1	2	3	3	3	3	3	3
Low-C	L Col R Fall (tule) Chinook	Threatened	12,329	54,100	23%	1	2	3	3	3	3	1	2
Low-C	L Col R Coho	Threatened	31,524	129,550	24%	1	3	3	3	3	3	3	2
Low-C	L Col R Summer Steelhead	Threatened	10,594	29,800	36%	2	4	4	4	2	4	4	4
Low-C	Col R Chum	Threatened	11,762	33,000	36%	2	2	4	4	4	4	4	4
Low-C	SW WA Winter Steelhead	Threatened	3,252	5,850	56%	2	4	5	5	5	5	5	5
Low-C	L Col R Late Fall (bright) Chinook		10,800	16,700	65%								
Low-C	L Col R Fall (bright) Chinook	Threatened	11,000	11,000	100%	5	5	5	5	4	5	4	5
Mid-C	M Col Sockeye	Not Listed	1,036	45,000	2%	3	3	3	2	1	3	3	
Mid-C	M Col R Spring Chinook	Not Listed	11,600	40,425	29%	2	4	4	4	4	4	4	4
Mid-C	M Col R Summer Steelhead	Threatened	18,155	43,850	41%	2	4	4	4	4	2	4	4
Mid-C	M Col R Coho	Not Listed	6,324	11,600	55%		5	4	5	5	5	4	
Mid-C	M Col R Summer/Fall Chinook	Not Listed	11,500	13,000	88%	5	5	5	5	5	5	4	5
Up-C	U Col R Coho	Not Listed	392	15,000	3%								
Up-C	U Col R Summer Steelhead	Threatened	1480	31,000	5%	1	1	2	1	1	1	3	2
Up-C	U Col R Sockeye	Not Listed	40,850	580,000	7%	1	3	1	1	1	2	3	3
Up-C	U Col R Spring Chinook	Endangered	1430	19,840	7%	1	3	1	1	1	2	3	1
Up-C	U Col R Summer Chinook	Not Listed	16920	78,350	22%	1	2	1	1	1	3	1	2
Up-C	U Col R Fall Chinook	Not Listed	92,400	62,215	149%	5	5	4	5	5	5	4	5
Snake	Snake R Coho	Not Listed	100	26,600	0%								
Snake	Snake R Sockeye	Endangered	100	15,750	1%	3	3	1	1	1	2	3	
Snake	Snake R Spring/Summer Chinook	Threatened	6,988	98,750	7%	1	3	1	1	2	2	3	3
Snake	Snake R Summer Steelhead	Threatened	28,000	75,000	37%	2	4	4	2	2	2	4	4
Snake	Snake R Fall Chinook	Threatened	8,360	10,780	78%	5	5	4	4	4	5	4	
Willam	U Will R Spring Chinook	Threatened	4,278	47,850	9%	1	2	3	3	1	3	3	2
Willam	U Will R Winter Steelhead	Threatened	2,816	27,805	10%	1	2	3	3	3	1	3	3

Harvest

		Impact Level				
		Low	Medium	High	Very High	
Stock Status	Low	LC SpCH LC Coho LC WSthd Will SpCH MC Sock UP SpCH UC Sock UC Sum Sthd SN SpCH SN Sock Will W Sthd		LC Tule FCH	UC Sum CH	<p>Impact Level Low: less than 20% Medium: 20-30% High: 31-50% Very High: Greater than 50%</p> <p>Stock Status (based on CBP medium goal) Low: less than 25% Medium: 25-50% High: 51-75% Very High: greater than 75%</p> <p>Prioritization Status Red: Priority 1 Orange: Priority 2 Yellow: Priority 3 Blue: Back burner Green: Good shape</p>
	Medium	LC Chum LC Sum Sthd MC Sum Sthd MC SpCH	SN Sum Sthd			
	High	SWW WSthd	MC Coho	SN FCH		
	Very High			LC Bright FCH	MC FCH UC FCH	